



VBI70
Health Team/Working Group Meeting
DRAFT SUMMARY

November 16, 2000

8:30 - 1:30

@ Swansea Rec Center

I. ATSDR Update

A. Health Study Discussion (Postponed until December)

1. Dave Campagna will be out for the meeting(s) in December (13 Health Team, 14 Working Group). Please provide any comments that you would like incorporated into the next proposal to Dave, by COB December 6.
2. In December: Be prepared to discuss major concerns/priorities related to the study design

B. Relationship between public health actions at VBI70

1. Public Health Assessments (PHA) evaluate sites to determine:
 - a. Need for Public Health actions
 - b. Suggest the nature of the public health actions needed
 - c. Identify the entity responsible for implementing the action(s)
2. Health Study (HS) that ATSDR's Division of Health Studies is considering
 - a. Identify acute arsenic-related health effects within the VBI70 community
 - b. Determine the prevalence and frequency of soil-consumption behaviors (esp. soil-pica)
 - c. Attempt to determine the quantity of soil consumed among any children displaying pica behavior.
3. Environmental Health Intervention Project (EHIP) [another action suggested in PHA]
 - a. Provider health education needs assessment to determine what information providers need
 - b. Provide educational opportunity to health care providers to respond to identified needs
 - c. Possibility of clinical evaluation
 -ATSDR's Division of Health Education and Promotion will consult with all Health Team members before making a final decision on selecting criteria for community participation in the clinical evaluation portion of the Health Intervention Project
 - d. Possibility of clinical referral

Comments From Working Group —

Will there be any Public Health Actions Related to LEAD?

NOTE THAT
 AOEC
 MAY NOT
 PARTICIPATE
 IN
 CLINICAL
 EVALUATION

C. Public Health Assessment (PHA)

1. Status report

- a. Expect to have initial release draft for agency and working group review available by January 2001
- b. Pica Workshop report should be available by January 2001, as well
- c. EPA was requested:
 - (1) to provide a list of the 33 properties that have been identified for emergency removal actions
 - (2) to provide periodic updates on the progress of each individual removal

2. Review of health discussion in PHA

Issues raised during discussion:

- a. Degree of uncertainty related to various aspects of the health evaluation, including
 - (1) exposure assumptions for pica children, including how many children exhibit the behavior, how often they exhibit the behavior, and how much soil they consume through the behavior
 - (2) the relationship between health effects from consuming contaminated liquids, usually drinking water compared to health effects from eating soil
 - (3) the likelihood or probability related to meeting all of the conditions necessary for the health effects discussed to occur in the VBI70 population
- b. Estimation of Hotspots
 - (1) use of the method agreed upon by working group members in the sampling protocol, versus
 - (2) use of the 8 intensively sampled properties and a regression analysis
 - (3) EPA identified 100 properties using the hotspot method from the sampling protocol and resampled the 30 discrete locations. Each discrete sample was analyzed. The data are expected to be available by January 2001
 - (a) Hotspots are identifiable by this method down to 1/30th of a yard (the square footage will vary yard-by-yard)
 - (b) Hotspots not identified by this sampling were agreed to be acceptably small by the tech team of the working group when the sampling protocol was developed.

- c. Risk Assessment Assumptions
 (1) Comparison of EPA and ATSDR Risk Assessment Parameters (to characterize acute exposures).

General parameters

Parameter	EPA	ATSDR
RBA (relative bioavailability)	0.45 (pig study)	0.6
Hot Spot Prediction*	MTHC (maximum theoretical hot spot concentration) (see Phase III Project Plan)	regression analysis

* (hot spot defined as 1/30 of a yard) calculated as

$$\frac{\text{Comp}_{\text{max}} = (9) (\text{BG}) + (1) (\text{hotspot})}{10} \quad \text{or} \quad (\text{Comp}_{\text{max}} \times 10) - 150\text{ppm} = \text{HotSpot}$$

where BG = 17 ppm

Specific parameters/assumptions

Parameter/assumption	EPA	ATSDR
pica ingestion rate	3 gm/day (EPA soil screening guidance)	5 gm/day* (literature review)
frequency of pica behavior	HQ = 1 time in 2 days (EPA soil screening guidance)	1 time/week 3 times/week*
acute toxicity value	HQ = 0.05	0.005 (acute MRL) 0.05 (LOAEL)
exposure duration	consistent with toxicity study (2 weeks)	1 day to several months

* In Colorado, naturally occurring [As] could present an acute toxicity risk if this ingestion rate is used.

(2) Comparison of EPA and ATSDR Risk Assessment Parameters/Assumptions for Chronic Arsenic Exposure (not discussed)

	EPA	ATSDR
Child Soil Ingestion	200 mg/day (EPA Guidance) RME	50 mg/day 200 mg/day 400 mg/day (EPA EFH)
Child Body Weight	15 kg (EPA Guidance)	11 kg 16.5 kg (NHANES data)
Adult	70 kg	65 kg

d. Impact of Different Assumptions on EPA's Baseline Risk Assessment (BRA) and ATSDR's Public Health Assessment (PHA)

- (1) Is it ok if there are differences?
- (2) What differences can the working group live with?
- (3) What differences need to be resolved?
- (4) How will these differences be resolved in light that they are not only affecting the VBI70 site, but also other sites across the country?
 - (a) EPA and ATSDR are planning to include many of these issues in the ongoing Arsenic Working Group discussions that are occurring between the agencies at a national level;
 - (b) however, there is no guarantee that the issues will be resolved in time to be incorporated into the BRA or the PHA for VBI70

D. ATSDR letters to residents

1. Explanation of health risk related to arsenic in yards
2. Need to discuss detailed action plans with members of the health team and the working group to define this and other recommendations.

E. Public Meeting/Poster Session (when Draft released for public comment April 01)

1. ATSDR Public Health Assessment Summary and Q/A - 40 min
2. Poster Stations
 - a. ATSDR Health
 - b. Soil ingestion/soil pica
 - c. Maps/Demographics
 - d. As/Pb Health Effects
 - e. Public Health Intervention Project
 - f. CDPHE Blood Lead

- g. Community reps
- h. EPA

II. Community Issues (15 minutes??)

- A. Would like to see Environmental Justice discussed at each meeting...hasn't been included lately.

III. EPA Update (1.5 hours)

A. Project Schedule (RI, FS, ROD, Proposed Plan)

- 1. OU -1 Project Schedule (RI, FS, ROD, Proposed Plan)
- 2. Anticipated release dates and comment periods
 - a. Revised Risk Assessment - 1/24/2001
 - b. Outline of Feasibility Study - 1/24/2001
 - c. Remedial Investigation/Feasibility Study Report - 3/1/2001
 - d. Proposed Plan - 3/1/2001
 - e. Pilot Study - 4/1/2001
 - f. Record of Decision - 5/15/2001
- 3. "Public Health Alternative(s)" - what does this mean?, what might it look like? (Discussion postponed)

B. Status reports

- 1. OU2-Smelters investigation (Postponed until December)
 - a. Define specific topics for discussion in December
- 2. Pilot scale soil study
 - a. Purpose of study: to determine if there is a "fingerprint" for site contamination
 - b. Delays in submitting samples to laboratories
 - c. Meeting with all of the researchers to discuss interpretation and compare results sometime in February (WG members welcome to observe)
 - d. Expect a report in April 2001
- 3. Removal
 - a. All owners have been notified by OSC.
 - b. Expect to be finished with moving dirt by mid-December at all 33 homes identified in Phase III
 - c. Landscaping and other final actions will occur in spring
- 4. Pig study
 - a. Second study to evaluate lead
 - b. Sudden lab opportunity that EPA decided to take advantage of